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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,558	12/06/2001	Albert Young	3COM-3730.CTO.US.P	6325

7590 09/19/2005

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EXAMINER
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SIMITOSKI, MICHAEL J

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/016,558

Applicant(s)

YOUNG ET AL.

Examiner

Michael J. Simitoski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-60 is/are pending in the application.
- 4a) Of the above claim(s) 2-7, 20, 22-27, 40, 42-47 and 60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 8-19, 21, 28-39, 41 and 48-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/11/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

ET

### DETAILED ACTION

1. The IDS of 3/11/2003 was received and considered.
2. Claims 1-60 are pending.

### *Election/Restrictions*

3. Claims 2-7, 20, 22-27, 40, 42-47 & 60 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/27/2005.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 8-9, 19, 21, 28-29, 39, 41, 48-49 & 59 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,070,243 to See et al. (See).

Regarding claims 1, 19, 21, 39, 41 & 59, See discloses in a network comprising a first electronic device/intelligent edge device (Fig. 1, #10) and a second electronic device/network management station (Fig. 1, #20), an authentication method comprising authenticating said second electronic device/network management station to said first electronic device/intelligent edge device (col. 5, lines 43-47), said first electronic device communicatively coupled to said

second electronic device (Fig. 1), authenticating said first electronic device to said second electronic device (col. 5, lines 43-47), determining a key at said first electronic device and at said second electronic device (col. 5, lines 45-47) and authenticating a user to a central authentication server (col. 5, lines 59-62, col. 6, lines 4-18 & col. 8, lines 14-48).

Regarding claims 8, 28 & 48, See discloses a method, wherein the first electronic device is a client device/intelligent edge device (Fig. 1, #10) and said second electronic device/network management station (Fig. 1, #20) is a central authentication server (Fig. 3A, #320).

Regarding claims 9, 29 & 49, See discloses a method, wherein a network device/intelligent edge device (Fig. 3A) is employed for providing an interface/ID RLY between said client device/intelligent edge (ID REQ) device and said central authentication server (Fig. 1).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 10-11, 30-31 & 50-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over See, as applied to claims 9, 29 & 49 above, in view of Applied Cryptography, Second Edition by **Schneier**, in further view of Computer Dictionary, Third Edition by **Microsoft**. See lacks receiving a first standard message from said client device and receiving said first standard message at said central authentication server whereby said client device is identified to said

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central authentication server. However, Schneier teaches a simple mutual authentication protocol, where Alice encrypts shared data with Bob's public key and sends it to him to verify Alice's authenticity (p. 54, §Mutual Authentication Using the Interlock Protocol, (1) and (5)) and Bob does the same in reverse (p. 54, §Mutual Authentication Using the Interlock Protocol, (3) and (4)). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify See to use the Interlock protocol, and hence to send a first standard message from the client device to the central authentication server to identify the client to the server and to send a second standard message from the central authentication server to the client to identify the server to the client. One of ordinary skill in the art would have been motivated to perform such a modification to permit the client and authentication server to mutually authenticate each other, as taught by Schneier (p. 54, §Mutual Authentication Using the Interlock Protocol, (1)-(5)). As modified, See lacks explicitly receiving the first standard message at said network device and forwarding the message to the central authentication server and receiving a second standard message from the central authentication server and forwarding it to the client. However, Microsoft teaches that a router is an intermediary device on a communications network that expedites message delivery and links many computers together by receiving transmitted messages and forwarding them to their correct destinations (p. 415, §Router). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify See to include a network device/router between the client/intelligent edge device and the central authentication server, and hence to receive the first standard message from the client and forward the message to the authentication server and to receive a second standard message from the authentication server and forward the message to the

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client. One of ordinary skill in the art would have been motivated to perform such a modification to expedite message delivery and link many computers together, as taught by Microsoft (p. 415, §Router).

8. Claims 10-17, 30-37 & 50-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over See, as applied to claims 9, 29 & 49 above, in view of “PPP EAP TLS Authentication Protocol” by Aboba et al. (**Aboba**).

Regarding claims 10, 13, 30, 33, 50 & 53, as described above, See lacks receiving a first standard message from said client device and receiving said first standard message at said central authentication server whereby said client device is identified to said central authentication server. However, Aboba teaches the EAP TLS protocol to permit mutual authentication and key exchange between two endpoints (p. 1, §1, ¶2). The protocol includes receiving a first standard message/client response packet (p. 4, ¶3) from the client to the authenticator (p. 2, §3.1) at a network device/authenticator acting as a passthrough (p. 2, §3.1) and forwarding said first standard message/client response packet to a central authentication server/RADIUS server or backend security server (p. 2, §3.1 & p. 4, ¶3) and receiving said first standard message/client response packet at said central authentication server/RADIUS/EAP server, whereby the client device is identified to said central authentication server (p. 4, ¶4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to receive a first message from a client at a network device and forward the message from the network device to a central authentication server. One of ordinary skill in the art would have been motivated to

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perform such a modification to permit mutual authentication and key exchange between two endpoints, as taught by Aboba (p. 1 §1 ¶2, p. 2 §3.1 & p. 4 ¶3-4).

Regarding claims 11, 14-15, 31, 34-35, 51 & 54-55, See lacks sending a second standard message to the network device from said central authentication server and forwarding the message to the client from the network device. However, Aboba teaches the EAP TLS protocol to permit mutual authentication and key exchange between two endpoints (p. 1, §1, ¶2). The protocol includes sending a second standard message/server key exchange message (p. 4, ¶1) to the network device/authenticator acting as a passthrough (p. 2, §3.1) and forwarding said second standard message to said client, whereby said central authentication server is authenticated to said client device (p. 5, ¶2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to send a second message from a central authentication server to a network device and forward the message from the network device to the client. One of ordinary skill in the art would have been motivated to perform such a modification to permit mutual authentication and key exchange between two endpoints, as taught by Aboba (p. 1 §1 ¶2, p. 2 §3.1 & p. 4 ¶3-4).

Regarding claims 12, 16-17, 32, 36-37, 52 & 56-57, See lacks sending a third message to said network device from said client device and forwarding the third message to the central authentication server. However, Aboba teaches the EAP TLS protocol to permit mutual authentication and key exchange between two endpoints (p. 1, §1, ¶2). The protocol includes sending a third message/client key exchange message (p. 4, ¶3-4) to the network device/authenticator acting as a passthrough (p. 2, §3.1) and forwarding the message to the central authentication server/EAP server (p. 4, ¶3-4). Therefore, it would have been obvious to

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one having ordinary skill in the art at the time the invention was made to send a third message from the client to a network device and forward the message from the network device to the central authentication server. One of ordinary skill in the art would have been motivated to perform such a modification to permit mutual authentication and key exchange between two endpoints, as taught by Aboba (p. 1 §1 ¶2, p. 2 §3.1 & p. 4 ¶3-4).

9. Claims 18, 38 & 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over *See*, as applied to claims 1, 21 & 41 above, in view of How Networks Work by Derfler et al. (*Derfler*). *See* lacks the first and second devices being communicatively coupled by a wireless connection. However, Derfler teaches that wireless LANs allow users to move around without losing their connection (p. 114). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify *See* to make use of a wireless LAN to couple the first and second devices. One of ordinary skill in the art would have been motivated to perform such a modification to enable users to move around without losing their connection, as taught by Derfler (p. 114).

### *Conclusion*

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (571) 272-3841. The examiner can normally be reached on Monday - Thursday, 6:45 a.m. - 4:15 p.m.. The examiner can also be reached on alternate Fridays from 6:45 a.m. – 3:15 p.m.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached at (571) 272-3838.

**Any response to this action should be mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Or faxed to:**


(571) 273-8300  
(for formal communications intended for entry)

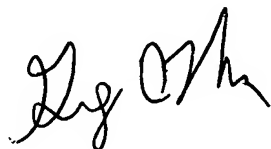
**Or:**

(571) 273-3841 (Examiner's fax, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
MJS  
September 8, 2005

  
GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
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